

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Marvin L. Boerboom

Serial No.: 10/804,589

Filed: March 19, 2004

For: PLANTS AND SEEDS OF CORN
VARIETY I900420

Group Art Unit: 1638

Examiner: Fox, D.

Atty. Dkt. No.: DEKA:327US

DECLARATION OF TIMOTHY R. KAIN

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Timothy R. Kain, hereby declare:

1. I am employed by Monsanto Company as a Patent Scientist, having as my primary responsibility the collection and control of information for the legal protection of Monsanto Technology LLC proprietary varieties.

2. I understand that the Examiner in charge of reviewing the patent application captioned above has rejected the claims on the basis that plants 89DUD3 and 91DUD4 were known in the art and, absent evidence to the contrary, are the same as variety I900420. I am therefore presenting this Declaration to provide further information regarding morphological analyses conducted by Monsanto Company showing that varieties 89DUD3 and 91DUD4 differ from variety I900420. The results of the analyses can be summarized as follows:

Morphological Traits for Corn Variety 89DUD3

	CHARACTERISTIC	VALUE
1.	STALK	
	Plant Height (cm)	201.8
	Ear Height (cm)	75.4
	Anthocyanin	Absent
	Nodes With Brace Roots	2.2
	Brace Root Color	Dark
	Internode Direction	Straight
	Internode Length cm.	12.3

2.	LEAF	
	Color	Green
	Length cm.	65.8
	Width cm.	9.7
	Sheath Anthocyanin	Absent
	Sheath Pubescence	Moderate
	Marginal Waves	Moderate
	Longitudinal Creases	Moderate

3.	TASSEL	
	Length cm.	29.8
	Spike Length cm.	21.5
	Peduncle Length cm.	3.7
	Branch Number	3.6
	Anther Color	Red
	Glume Color	Light Red
	Glume Band	Absent

4.	EAR	
	Silk Color	Pink
	Number Per Stalk	1.0
	Position (attitude)	Upright
	Length cm.	14.6
	Shape	Semi-conical
	Diameter cm.	4.0
	Shank Length cm.	13.4
	Husk Bract	Short
	Husk Cover cm.	2.6
	Husk Opening	Tight
	Husk Color Fresh	Green
	Husk Color Dry	Buff
	Cob Diameter cm.	2.7

	Cob Color	Pink
	Shelling Percent	80.2

5.	KERNEL	
	Row Number	15.6
	Number Per Row	27.0
	Row Direction	Straight
	Type	Intermediate
	Cap Color	Yellow
	Side Color	Orange
	Length (depth) mm.	10.8
	Width mm.	7.2
	Thickness	4.
	Endosperm Type	Normal
	Endosperm Color	Yellow

Morphological Traits for Corn Variety 91DUD4

	CHARACTERISTIC	VALUE
1.	STALK	
	Plant Height (cm)	190.3
	Ear Height (cm)	66.5
	Anthocyanin	Basel Weak
	Nodes With Brace Roots	-
	Brace Root Color	Dark
	Internode Direction	Straight
	Internode Length cm.	-

2.	LEAF	
	Color	Green
	Length cm.	-
	Width cm.	8.6
	Sheath Anthocyanin	Basel Weak
	Sheath Pubescence	Heavy
	Marginal Waves	Moderate
	Longitudinal Creases	Moderate

3.	TASSEL	
	Length cm.	24.9
	Spike Length cm.	18.7
	Peduncle Length cm.	-
	Branch Number	4.8
	Anther Color	Purple

	Glume Color	Pale Purple
	Glume Band	Absent

4.	EAR	
	Silk Color	Purple
	Number Per Stalk	1.0
	Position (attitude)	Upright
	Length cm.	15.0
	Shape	Cylindrical
	Diameter cm.	3.5
	Shank Length cm.	7.0
	Husk Bract	Short
	Husk Cover cm.	5.8
	Husk Opening	Tight
	Husk Color Fresh	Green
	Husk Color Dry	Buff
	Cob Diameter cm.	2.3
	Cob Color	Pink
	Shelling Percent	81.5

5.	KERNEL	
	Row Number	13.6
	Number Per Row	26.8
	Row Direction	Straight
	Type	Dent
	Cap Color	Deep Yellow
	Side Color	Orange
	Length (depth) mm.	9.1
	Width mm.	7.4
	Thickness	4.4
	Endosperm Type	Normal
	Endosperm Color	Orange

3. The foregoing demonstrates that varieties 89DUD3 and 91DUD4 are distinct from variety I900420 in a number of traits. Based on the nature of the differences shown above and lack of any teaching in the art of the traits of variety I900420, varieties 89DUD3 and 91DUD4 neither teach nor suggest corn variety I900420.

4. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 18 JUNE 2007


Timothy R. Kain